

Introduction

Jade and Simon are going to a Nature Centre.

The tasks are about the Nature Centre.

Task 1

(4 marks)

- a. Jade and Simon want to get to the Nature Centre for 10am.

It takes $\frac{3}{4}$ of an hour for the bus to get to there.

Which **buses** should they get to be at the Nature Centre for 10am?

Tick the **buses**.

(1 mark)

Bus number	Leaving at
12	9.00am
13	9.15am
12A	9.30am
13A	9.45am
14	10.00am
14A	10.15am

- b. The Nature centre closes at 4pm.

The last entry into the centre is $1\frac{1}{4}$ hours before it closes.

What is the latest time people can get into the centre?

(1 mark)

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SAMPLE

- c.** Jade and Simon arrive late at 10.15am. (2 marks)
The Nature Centre closes at 4pm.
They want to spend 6 hours at the centre.
Can they do this?
Show your calculations.

Calculations

Answer

Task 2

(5 marks)

Use the money your Assessor has given you.

a. Simon and Jade want to buy the items below:

- map for the Nature Trail - £2.50
- 2 drinks - £1.23 each
- book - £2.60

Work out the total cost for all the items.

(2 marks)

Calculations

Answer

b. Show the money you would use to pay the total cost.

(1 mark)

c. Work out how much money is left over.

(2 marks)

Calculations

Answer

Task 3**(6 marks)**

Look at the map on the next page.

- a.** Fill in the gaps. (2 mark)

1	The smallest area is the _____ area.
2	The lake is shown as a _____.

- b.** Explain how you could show that the Woodland area covers $\frac{1}{3}$ of the total map. (3 marks)

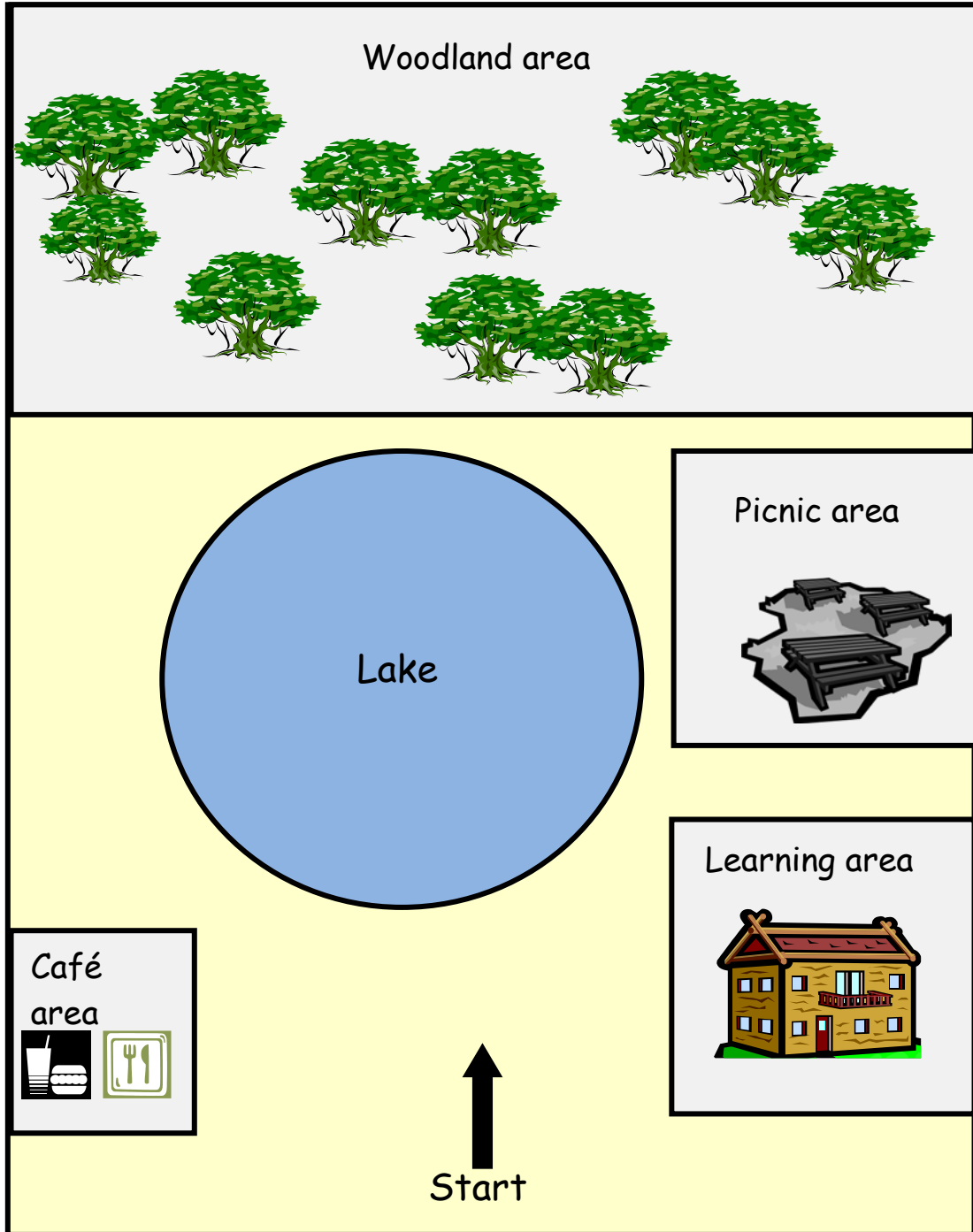
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- c.** What shape are the Picnic and Learning areas? (1 mark)

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How do you know this? (1 mark)

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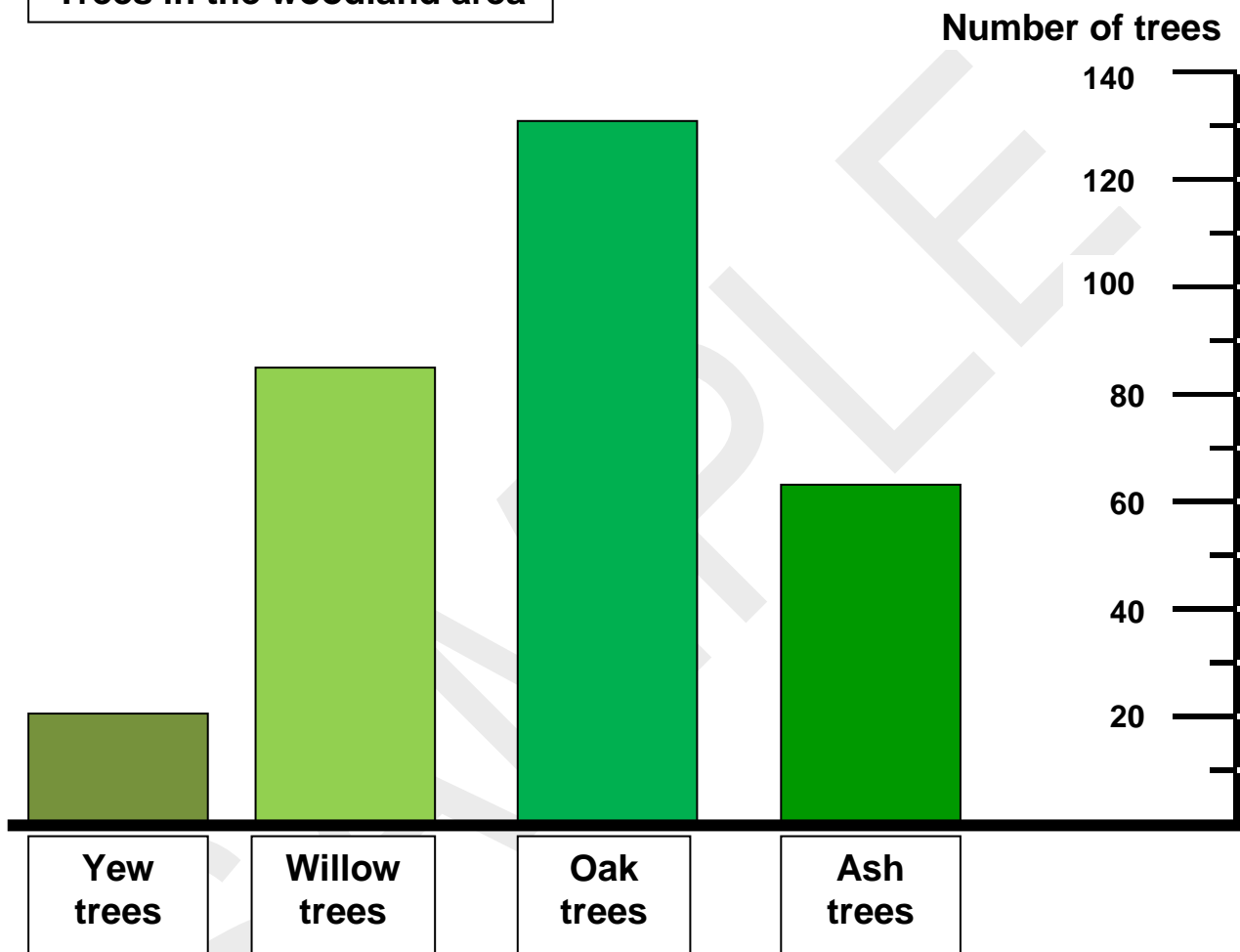


Task 4

(7 marks)

Show below are details about **Trees in the woodland area**. Use this information to answer the questions that follow.

Trees in the woodland area



Tree types



1. Yew tree



2. Willow tree



3. Oak tree



4. Ash tree

- a.** What does it show about the number of Oak trees and Yew trees?
Show your calculations. (2 marks)

- b.** There are almost how many Willow trees? (1 mark)

- c.** How many trees are there to the nearest 10? (1 mark)

- d.** Look at the Tree types details.
What can you say about similar heights? (1 mark)

- e. Compare all the details about the trees. (2 marks)

What **two** things can you say about the Oak tree?

SAMPLE

Task 5**(6 marks)**

Jade noted the groups of swans she saw.

The centre needs these details.

Look at Jade's list in the box below.

- a.** Work out the totals for each. (4 marks)
- b.** Write in the total number of swans Jade saw. (1 mark)
- c.** Show how to check your calculations. (1 mark)

Swan groups		Totals
a. 2 groups of 5	a.	_____
b. 10 groups of 4	b.	_____
c. 5 groups of 8	c.	_____
d. 4 groups of 2	d.	_____
e. 1 group of 10	e.	_____
f. 5 groups of 3	f.	_____
Total		_____

Calculations

Task 6**(5 marks)**

Jade wants to make a cube nest box to take home. Simon doesn't know what a nest box looks like.

- a.** Which **three** details describe the **cube** shape? (2 marks)

Tick your choices.

a	It has 3 corners	
b	It is a 2D shape	
c	It has 5 faces	
d	All sides are of equal length	
e	It has a circle at its base	
f	It is a 3D shape	
g	It has a curved face	
h	It has 4 faces	
i	Each face is a square	

- b.** Which three details above describe a **cylinder**?

Write the letters in the box below.

(1 mark)

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- c.** Jade finds a rectangular piece of wood to make the nest box.

Draw a 2D shape in the space below to show the piece of wood.

(2 marks)

Task 7

(6 marks)

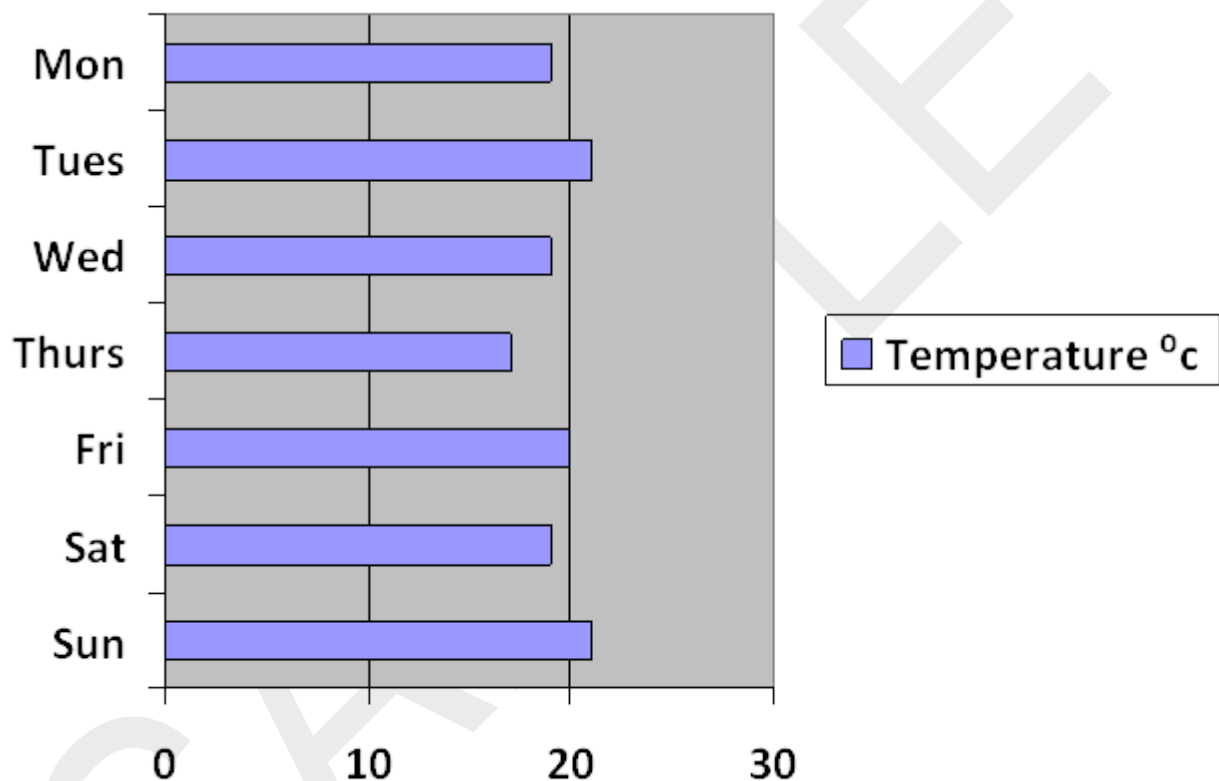
Squirrels look for food during the day, but only when the temperature is no higher than 20°C.

Look at the chart below. It shows day time temperatures.

- a. Which days would the squirrels be out looking for food?

Tick the days on the chart.

(4 marks)



- b. What can you say about the temperature on Thursday? (2 marks)

Task 8**(8 marks)**

Each nest box has a number on it.

The table shows the numbers.

- a. What are the number patterns used for each set of boxes?

Put your answers in the box below the table.

(5 marks)

a. Blue tit	b. Finch	c. Owl
Nest box numbers	Nest box numbers	Nest box numbers
5	12	00
10	22	01
15	32	02
20	42	03
25	52	04
30	62	05
35	72	06
40	82	07
45	92	08
50	102	09

a. Blue tit

b. Finch

c. Owl

- b.** Numbers need to be put on to nest box numbers for two other bird types.

Create new numbers.

Use different number patterns.

Put these in the table.

(3 marks)

a. Robin	b. Swift
Nest box numbers	Nest box numbers

Task 9

(4 marks)

Bird baths are sold in three sizes.

These are shown on the next page.

- a. Label these in order of size – 1, 2 & 3 (3 should be the largest and 1 the smallest). (1 mark)

- b. Which will hold the **most** water? (1 mark)
Tick to show your answer.

A

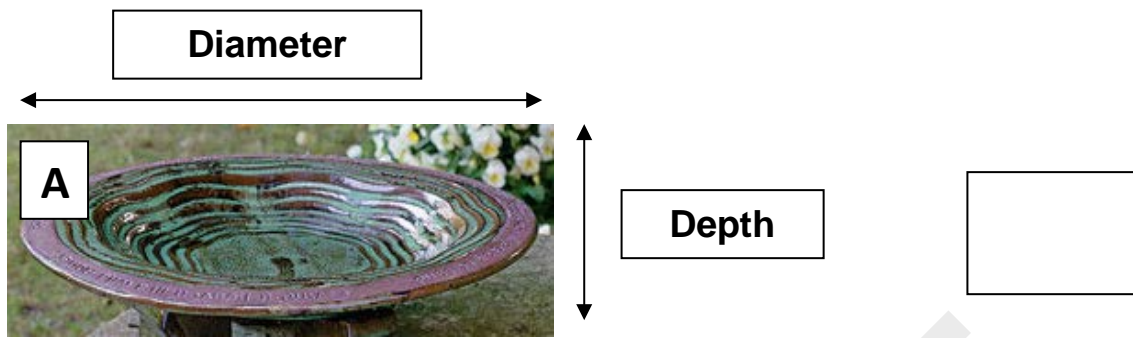
B

C

- c. How do you know this? (2 marks)



Bird Baths



3 cm depth
34 cm diameter



3 cm depth
30 cm diameter



3 cm depth
35 cm diameter bowl